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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,795	02/19/2002	Robert Bridges	BOUL/0007	1519

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EXAMINER

HOOLAHAN, AMANDA J

ART UNIT PAPER NUMBER

2859

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/936,795

Applicant(s)

BRIDGES, ROBERT

Examiner

Amanda J Hoolahan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claims 29/27 and 29/28 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

*25 and*

06 3. Claim ~~29~~<sup>25</sup>/(1-26) is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. It is unclear why the "or each failure element" is stated in line 7 of claim 29/(1-26) when there is only one failure element claimed previously.

06 b. It is also unclear how the leak will be indicated to a user if the indicator is located in the ground *as stated in claim 29/(1-26)*.

c. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this

can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 25 recites the broad recitation the length of the failure element in the direction in which the indicator element moves on failure is at least 3 times its size in any other dimension, and the claim also recites the length of the failure element in the direction in which the indicator element moves on failure is preferably at least 10 times, more preferably at least 20 times, and most preferably at least 50 times its size in any other dimension which is the narrower statement of the range/limitation.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 8-19, 21-24, and 26 are rejected under 35 U.S.C. 102(b) as being unpatentable by USPN 3,846,795 to Jones.

Jones discloses a device for detecting the presence of a chemical contaminant, the device comprising an indicator element (26) which is held in a first position by means of a failure element (30) which is held in tension, the failure element being made of a material which fails in

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the presence of the chemical contaminant, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide an indication of the presence of the contaminant; the indicator element is held in the first position by a biasing force, the biasing force acting to move the indicator element to the second position upon failure of the failure element; the biasing force is provided by the resilience of the indicator element; the resilient indicator element is a spring which is fixed to the failure element, the spring being under compression, such that the failure element is under tension; failure element is a tubular member; the tubular member is sealed, the inside of the tubular member is maintained at a pressure other than atmospheric, and means (42) are provided to monitor this pressure to determine the integrity of the tubular member; the failure element is made of a material which changes its appearance in the presence of the contaminant (column 5, lines 7-14); the indicator element is held in the first position by a biasing force and wherein a further force, which is strong enough to override the biasing force is arranged to act on the indicator element to move it to the second position upon failure of the failure element; the failure element is a tubular element and the indicator element is within the tubular element and is fixed at one end to the failure element, while its other end projects beyond the other end of the failure element and is biased away from the other end of the failure element; the failure element and indicator element are arranged to be supported vertically, wherein the further force is gravity (see Figure 1); the failure element comprises a number of different materials (column 6, lines 67-68) arranged in series and/or in parallel.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of European Patent Application No. 0 370 685 to Beard et al. [hereinafter Beard].

Numeral A has been added to Figure 1 in reference to a certain component of the device disclosed by Jones. See copy attached at the end of this action.

Jones discloses the device as described above in paragraph 5 including a nut (A).

Jones does not disclose the spring being attached to the failure element by a respective starlock washer at the end of the spring, each washer being anchored to the failure element so as to be capable of movement in only one direction along the failure element.

Beard discloses a starlock washer (40) attached at the end of a spring (42) so that the spring is capable of movement in only one direction. The use of a particular type of constraint claimed by the applicant, is considered to be nothing more than a choice of engineering skill, choice, or design because since both are well known alternate types of constraints which will perform the same function, if one is replaced with the other, it is considered to be nothing more than the use of one of numerous and well known alternate types of constraints that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to hold the spring in place, as already suggested by Beard.

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8. Claims 25, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones.

Jones discloses the device as described above in paragraph 5.

With respect to claim 25: Jones does not disclose the length of the failure element in the direction in which the indicator element moves on failure is at least 3 times, preferably at least 10 times, more preferably 20 times, and most preferably 50 times its size in any other dimension. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have the length of the failure element to be any number of times its size in any other dimension since it has been held that an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claims 27-28: Jones does not disclose an arrangement comprising a plurality of devices arranged over an area and arrange them substantially parallel. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to arrange a plurality of devices over an area and arrange them parallel in order for the user to be able to see the devices and be able to compare them to one another equally, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

#### ***Allowable Subject Matter***

9. Claim 29/(1-26) would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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10. The following is an examiner's statement of reasons for allowance:

The prior art does not disclose or suggest a method of detecting leaks from a vessel in a filling station containing a powerful source of chemical contaminants, the method comprising the steps of positioning a device according to any one of claims 1 to 26 in the ground beneath a vessel and monitoring the failure element to determine when it has moved to a second position indicating the presence of a leak.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 3,233,459 to Gleason et al., USPN 5,955,025 to Barrett, and USPN 4,071,319 to Nugent disclose indicating devices comprising a failure element.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda J Hoolahan whose telephone number is (703) 308-0139. The examiner can normally be reached on Monday through Friday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

ajh  
March 10, 2003  
Examiner



Diego Gutierrez  
Supervisory Patent Examiner

Technology Center 2800